GENERAL NOTES:

Materials:

Concrete:	Class V Special or Class VI 6 ksi minimum at 28 days 4 ksi minimum at transfer
Prestressed Strands:	ASTM A416 Grade 270 stress relieved or low relaxation
Spiral Reinforcing:	ASTM A82 cold-drawn steel wire

Provide a minimum concrete cover of 1 inch.

For spiral reinforcing, one turn is required for splices and two turns are required at both the tip and butt ends of the pole.

The design Front Face and Back Face of poles may vary transversely from the section shown by ± ¼" to assist with removal from forms. Balance addition and subtraction of face widths to maintain section areas shown.

Provide hand hole and coupler cover plates made of non-corrosive materials. Attach cover plates to poles using lead anchors or threaded inserts embedded in the poles in conjunction with round headed chrome plated screws.

Tie ground wires to the interior of reinforcing steel as necessary to prevent displacement during concreting operations.

Provide Identification Markings on the poles where indicated on the following sheets. Include the following information using inset numerals with 1" height:

Financial Project ID
Pole Manufacturer
Standard Pole Type Number
Pole Length (L)

Provide a Class 3 Surface Finish as specified in Section 400-15.2.4 of the Standard Specifications.

Pick-up and support locations shown may vary with a tolerance of ± 3".

In accordance with Specification 5-1.4.2, shop drawings are only required for additions, deletions, or modifications to this Design Standard.

INSTALLATION NOTES:

If a two point attachment is required by the plans, provide an eye bolt hole for the messenger wire or field-drill at the location indicated in the plans. When required, field-drill the eyebolt hole for the tether wire prior to installation.

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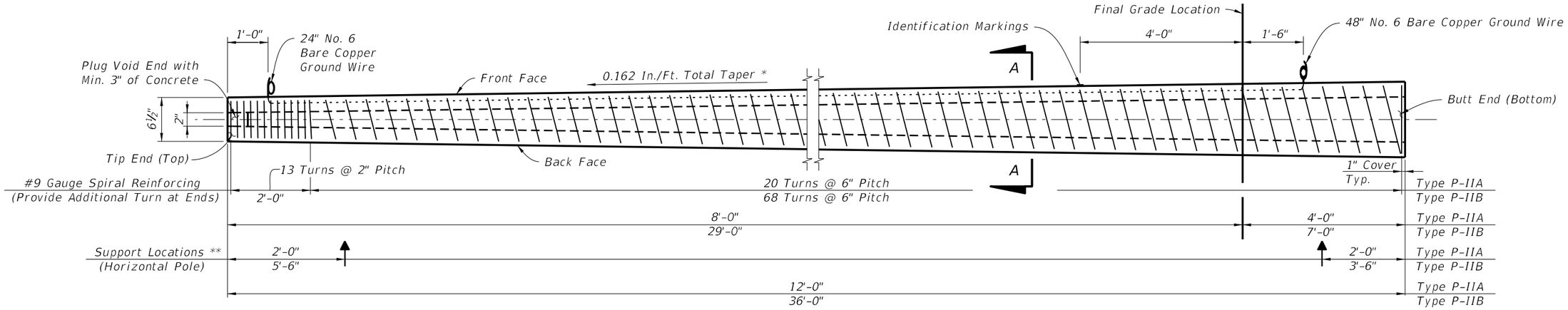
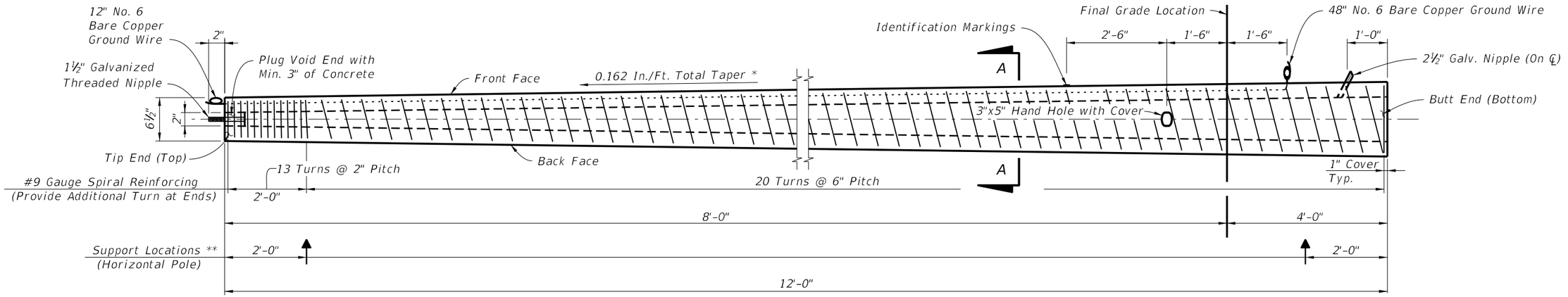
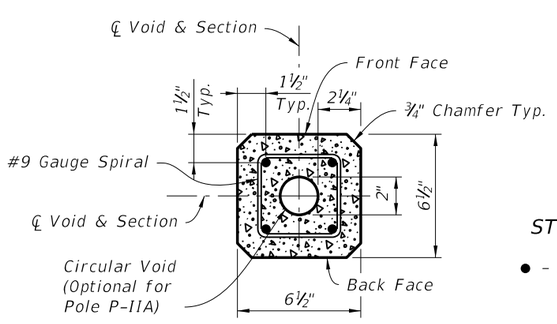
6/28/2012



SERVICE POLE P-IIA (12 Ft.) & P-IIB (36 Ft.) ELEVATION
(Strands Not Shown)



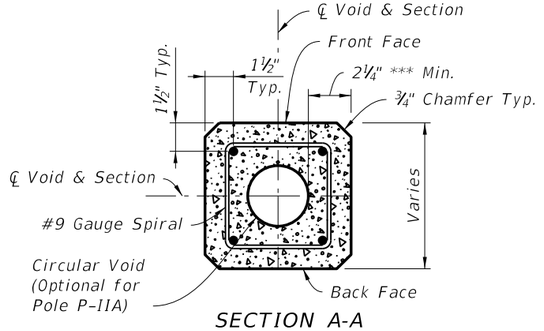
PEDESTAL POLE P-IIC (12 Ft.) ELEVATION
(Strands Not Shown)
(For Installation, Refer to Standard Index 17504)



TIP END SECTION (TOP)

STRAND LEGEND

- ● – *Prestressed Strand*
  0.5 In. Grade 270, LRS
  24 Kips Before Transfer
  (4 strands total)



SECTION A-A
(Typical Square Section)

NOTES:

Work this Index with the Strain Pole Schedule in the plans.

Strands shown are continuous from Tip End to Butt End.

Elevation view scale is exaggerated vertically for clarity.

For final erection, tilt pole upright with single point attachment located a distance 4 Ft. (for P-IIA & P-IIC) or 10 Ft. (for P-IIB) from the Tip End face.

* *Taper includes pole width, strands, reinforcing and void. (0.081 In./Ft. per face)*

** *Support locations are for strand release, storage, lifting and transport. Keep Back Face oriented downward until final erection.*

*** *Dimension may vary from 2¼" to 3½" to accommodate smaller radius of optional stepped (PVC) void. The void diameter shall not be less than 2".*

SERVICE AND PEDESTAL POLE TYPE P-II

LAST REVISION	REVISION	DESCRIPTION:			INDEX NO.	SHEET NO.
01/01/12			FDOT DESIGN STANDARDS 2013	CONCRETE POLES	17725	2

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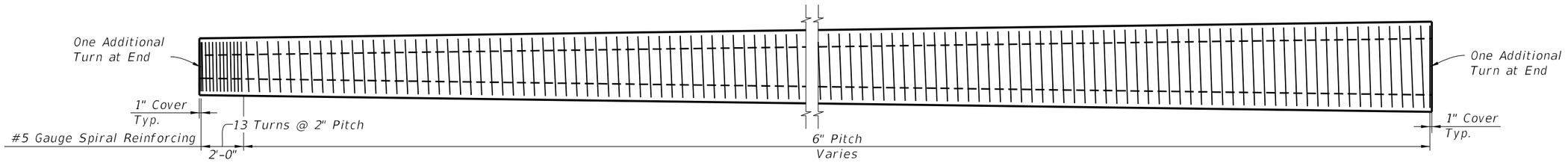
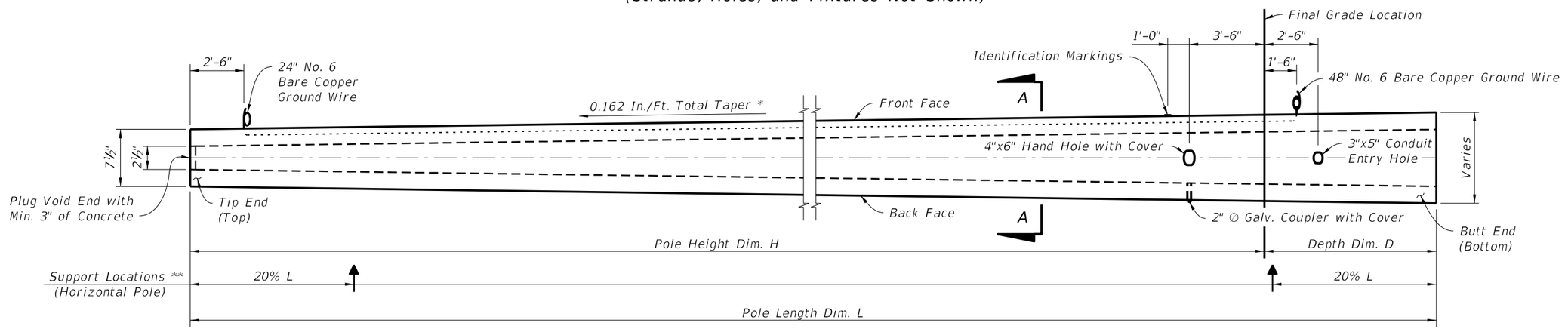
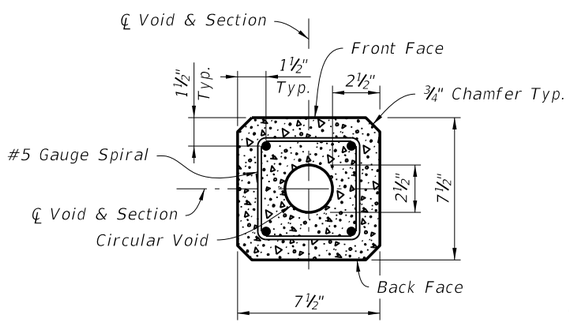


SPIRAL REINFORCING ELEVATION
(Strands, Holes, and Fixtures Not Shown)



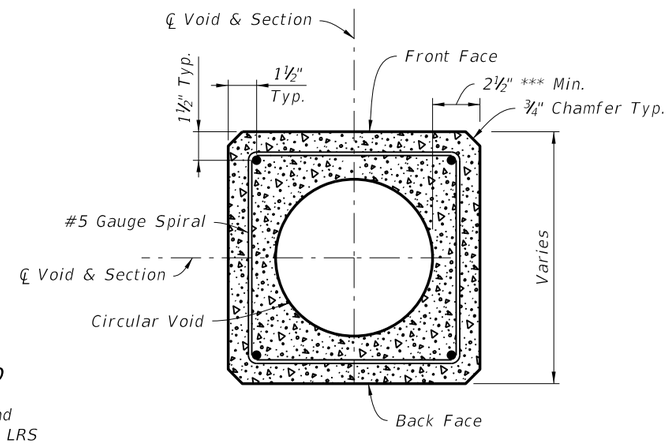
POLE ELEVATION
(Strands and Reinforcing Not Shown)
(See Design Standard Index 17900 and Specification 744 for
Modifications to Type P-III Poles Used at Traffic Monitoring Sites)



TIP END SECTION (TOP)

STRAND LEGEND

● – Prestressed Strand
0.5 In. Grade 270, LRS
31 Kips Before Transfer
(4 strands total)



SECTION A-A
(Typical Square Section)

NOTES:

Work this Index with the Strain Pole Schedule in the plans.

Strands shown are continuous from Tip End to Butt End.

Elevation view scale is exaggerated vertically for clarity.

For final erection, tilt pole upright with single point attachment located a distance 33.3% L from Tip End face.

* Taper includes pole width, strands, reinforcing and void. (0.081 In./Ft. per face)

** Support locations are for strand release, storage, lifting and transport. Keep Back Face oriented downward until final erection.

*** Dimension may vary from 2½" to 3¾" to accommodate smaller radius of optional stepped (PVC) void. The void diameter shall not be less than 2½".

LIGHTING AND TRAFFIC MONITORING POLES TYPE P-III

LAST REVISION	REVISION	DESCRIPTION:		FDOT DESIGN STANDARDS 2013	CONCRETE POLES	INDEX NO.	SHEET NO.
01/01/12						17725	3

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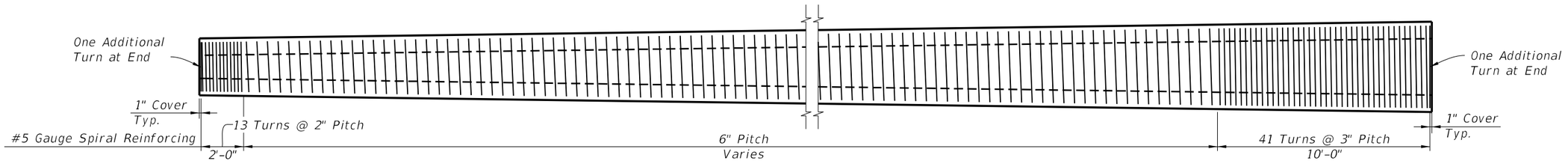
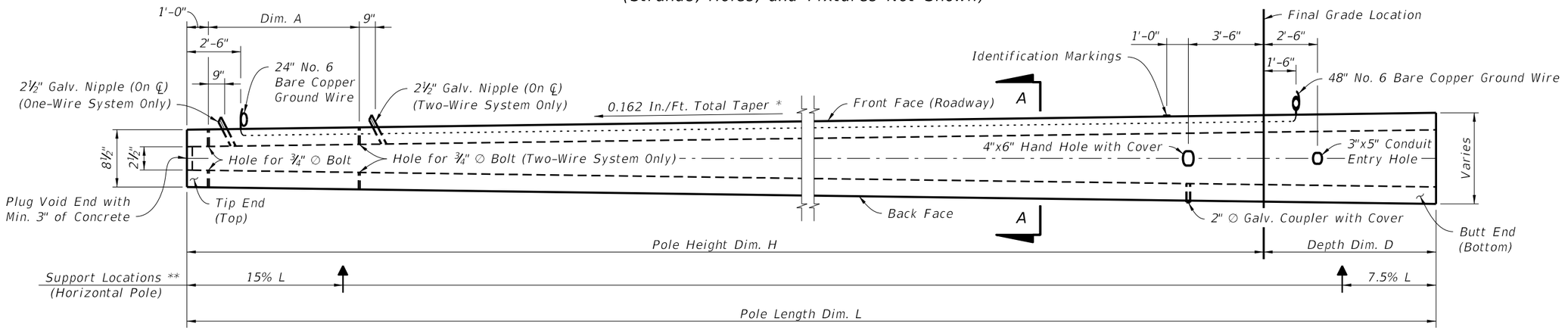
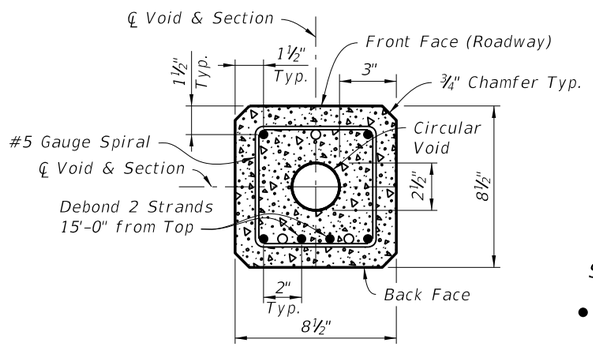


SPIRAL REINFORCING ELEVATION
(Strands, Holes, and Fixtures Not Shown)



POLE ELEVATION
(Strands and Reinforcing Not Shown)

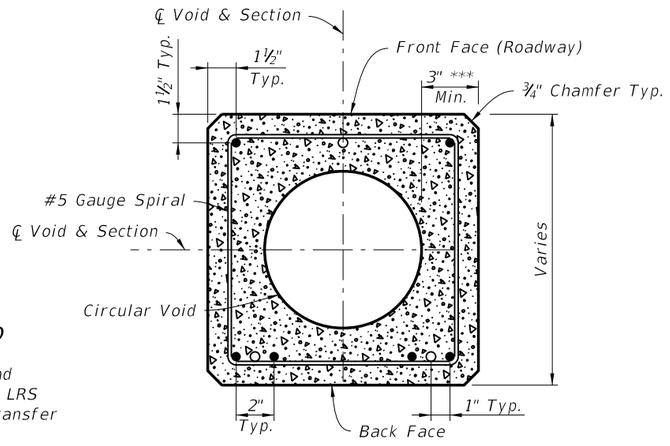


TIP END SECTION (TOP)
(For Dormant Strand Locations See Section A-A)

STRAND LEGEND

● – Prestressed Strand
0.5 In. Grade 270, LRS
31 Kips Before Transfer
(6 strands total)

○ – Dormant Strand
0.5 In. Grade 270, LRS
(3 strands total)



SECTION A-A
(Typical Square Section)

NOTES:

Work this Index with the Strain Pole Schedule in the plans.

Strands shown are continuous from Tip End to Butt End.

Elevation view scale is exaggerated vertically for clarity.

For final erection, tilt pole upright with single point attachment located a distance 20% L from the Tip End face.

* Taper includes pole width, strands, reinforcing and void. (0.081 In./Ft. per face)

** Support locations are for strand release, storage, lifting and transport. Keep Back Face oriented downward until final erection.

*** Dimension may vary from 3" to 4¼" to accommodate smaller radius of optional stepped (PVC) void. The void diameter shall not be less than 2½".

STRAIN POLE TYPE P-IV

LAST REVISION	REVISION	DESCRIPTION:		FDOT DESIGN STANDARDS 2013	CONCRETE POLES	INDEX NO.	SHEET NO.
01/01/12						17725	4

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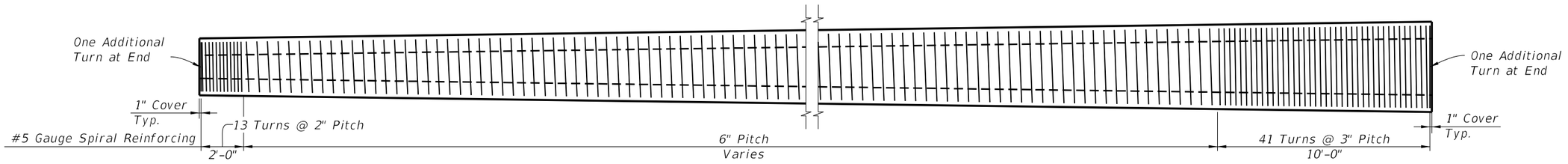
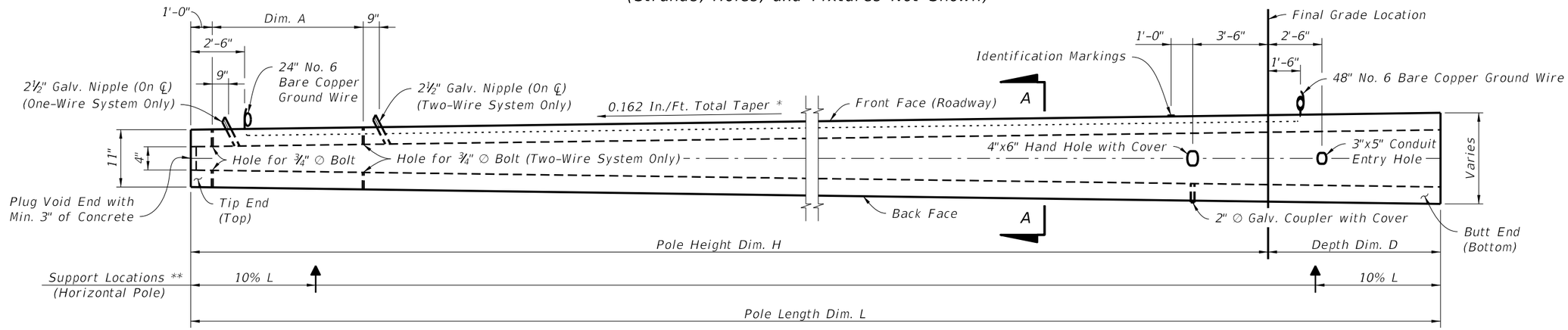
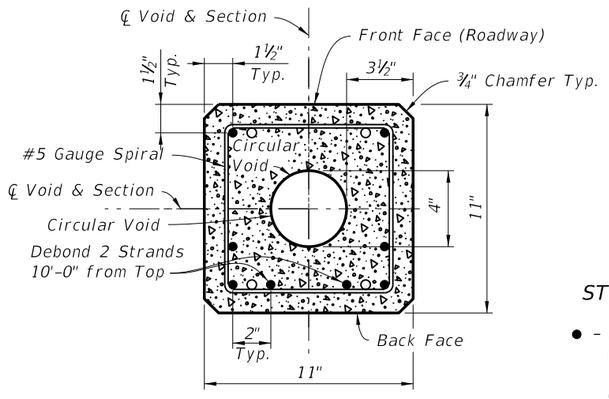


SPIRAL REINFORCING ELEVATION
(Strands, Holes, and Fixtures Not Shown)



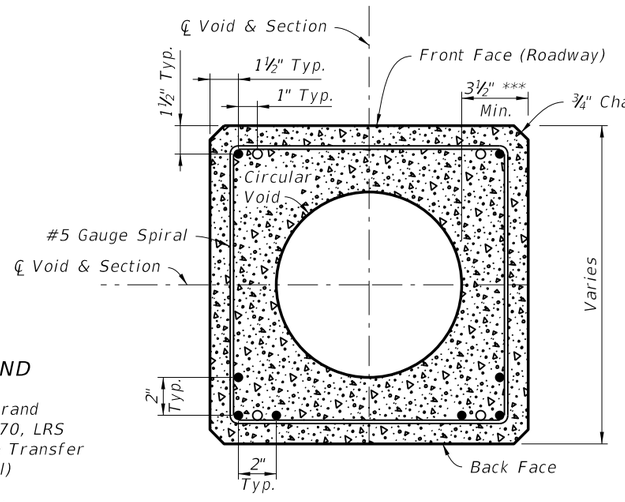
POLE ELEVATION
(Strands and Reinforcing Not Shown)



TIP END SECTION (TOP)
(For Dormant Strand Locations, See Section A-A)

STRAND LEGEND

- ● – Prestressed Strand 0.5 In. Grade 270, LRS 31 Kips Before Transfer (8 strands total)
- ○ – Dormant Strand 0.5 In. Grade 270, LRS (4 strands total)



SECTION A-A
(Typical Square Section)

NOTES:

Work this Index with the Strain Pole Schedule in the plans.

Strands shown are continuous from Tip End to Butt End.

Elevation view scale is exaggerated vertically for clarity.

For final erection, tilt pole upright with single point attachment located a distance 12.5% L from the Tip End face.

* Taper includes pole width, strands, reinforcing and void. (0.081 In./Ft. per face)

** Support locations are for strand release, storage, lifting and transport. Keep Back Face oriented downward until final erection.

*** Dimension may vary from 3½" to 4¾" to accommodate smaller radius of optional stepped (PVC) void. The void diameter shall not be less than 4".

STRAIN POLE TYPE P-V

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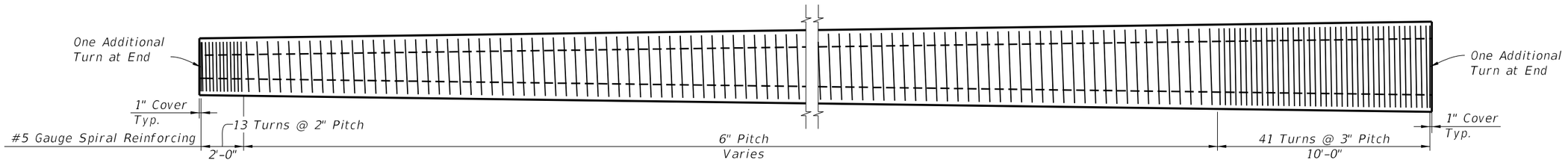
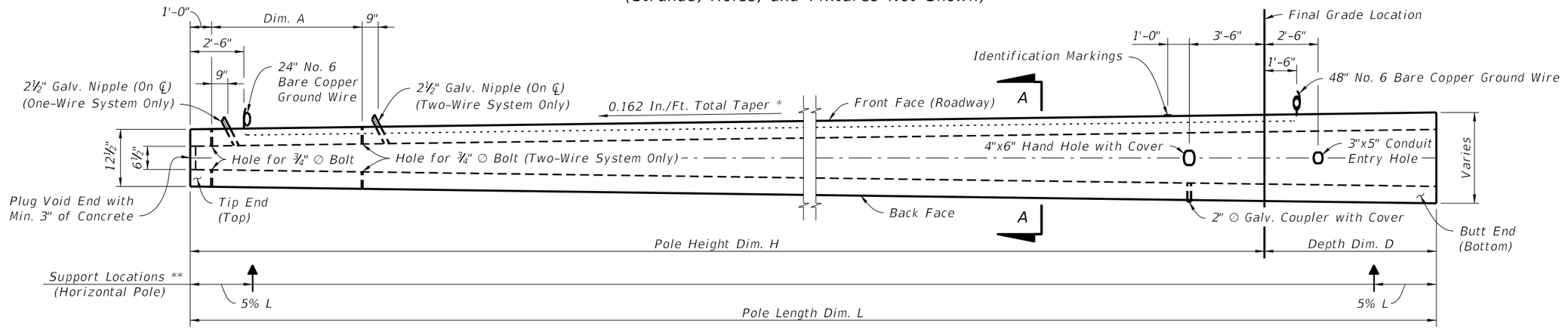
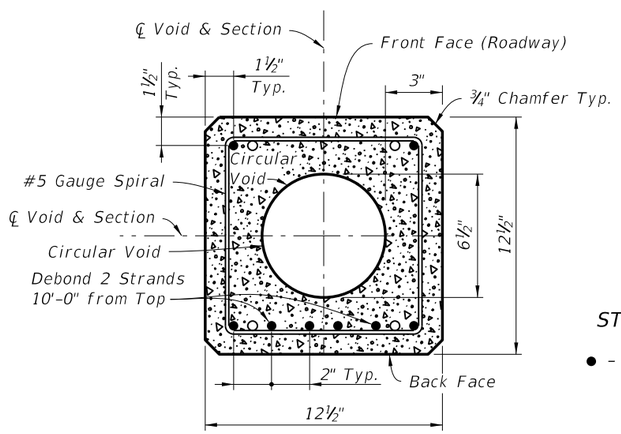


SPIRAL REINFORCING ELEVATION
(Strands, Holes, and Fixtures Not Shown)



POLE ELEVATION
(Strands and Reinforcing Not Shown)

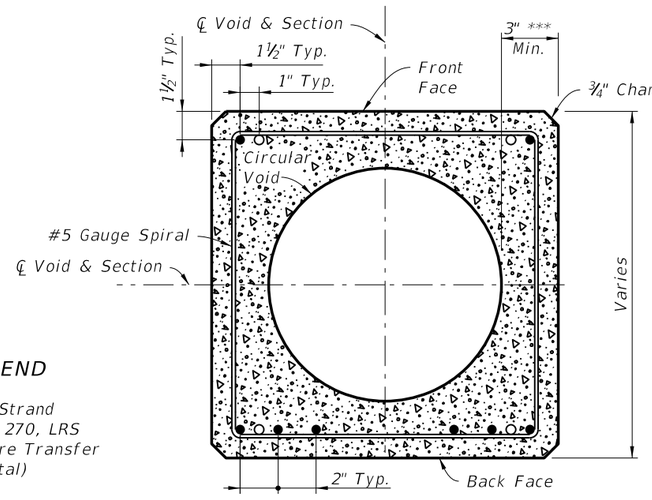


TIP END SECTION (TOP)
(For Dormant Strand Locations, See Section A-A)

STRAND LEGEND

● – Prestressed Strand
0.5 In. Grade 270, LRS
31 Kips Before Transfer
(8 strands total)

○ – Dormant Strand
0.5 In. Grade 270, LRS
(4 strands total)



SECTION A-A
(Typical Square Section)

NOTES:

Work this Index with the Strain Pole Schedule in the plans.

Strands shown are continuous from Tip End to Butt End.

Elevation view scale is exaggerated vertically for clarity.

For final erection, tilt pole upright with single point attachment located a distance 10% L from Tip End Face.

* Taper includes pole width, strands, reinforcing and void. (0.081 In./Ft. per face)

** Support locations are for strand release, storage, lifting and transport. Keep Back Face oriented downward until final erection.

*** Dimension may vary from 3" to 4¼" to accommodate smaller radius of optional stepped (PVC) void. The void diameter shall not be less than 6½".

STRAIN POLE TYPE P-VI

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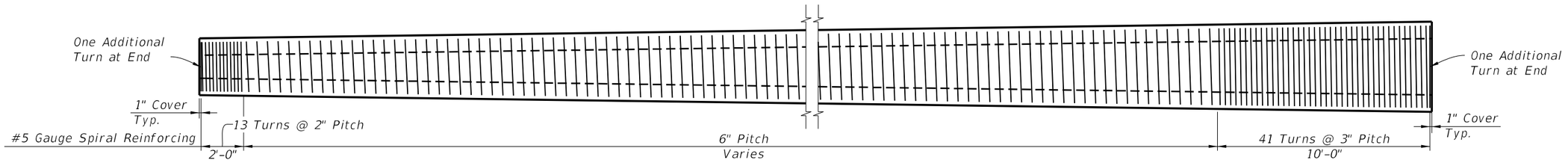
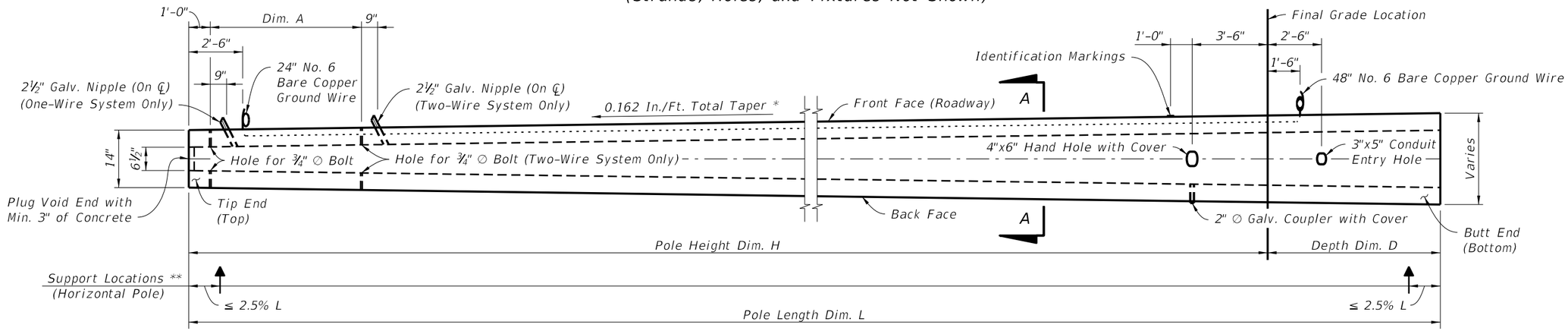
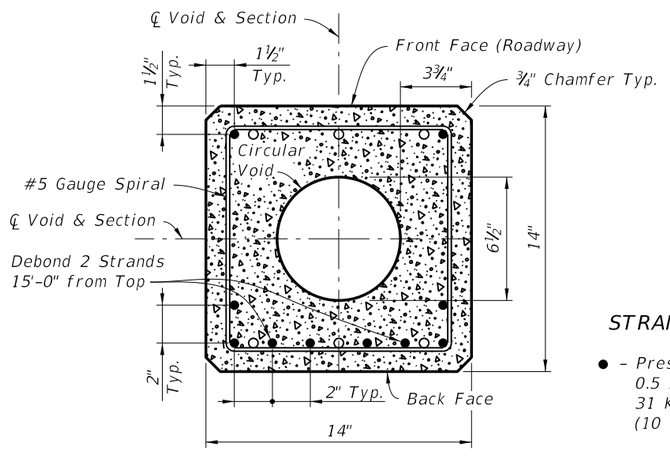
LAST REVISION	REVISION	DESCRIPTION:			INDEX NO.	SHEET NO.
01/01/12			FDOT DESIGN STANDARDS 2013	CONCRETE POLES	17725	6



SPIRAL REINFORCING ELEVATION
(Strands, Holes, and Fixtures Not Shown)



POLE ELEVATION
(Strands and Reinforcing Not Shown)

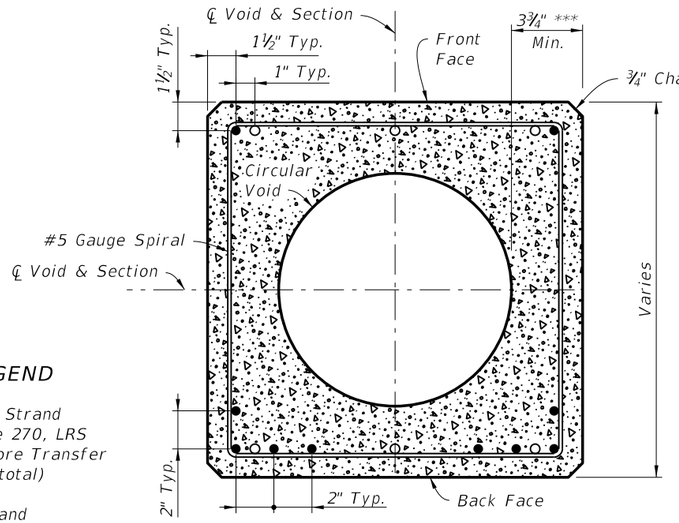


TIP END SECTION (TOP)
(For Dormant Strand Locations, See Section A-A)

STRAND LEGEND

● – Prestressed Strand
0.5 In. Grade 270, LRS
31 Kips Before Transfer
(10 strands total)

○ – Dormant Strand
0.5 In. Grade 270, LRS
(6 strands total)



SECTION A-A
(Typical Square Section)

NOTES:

Work this Index with the Strain Pole Schedule in the plans.

Strands shown are continuous from Tip End to Butt End.

Elevation view scale is exaggerated vertically for clarity.

For final erection, tilt pole upright with single point attachment located a distance 10% L from the Tip End face.

* Taper includes pole width, strands, reinforcing and void. (0.081 In./Ft. per face)

** Support locations are for strand release, storage, lifting and transport. Keep Back Face oriented downward until final erection.

*** Dimension may vary from 3¾" to 5" to accommodate smaller radius of optional stepped (PVC) void. The void diameter shall not be less than 6½".

STRAIN POLE TYPE P-VII

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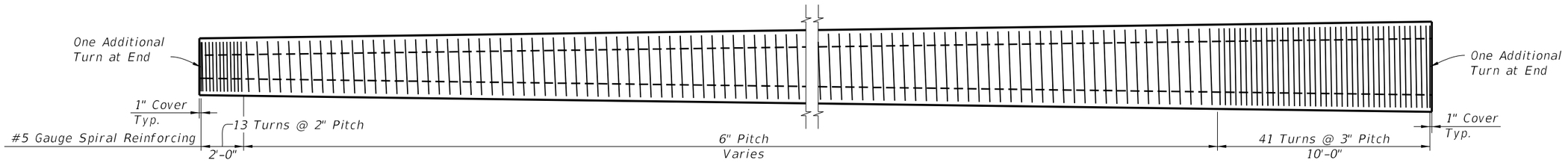
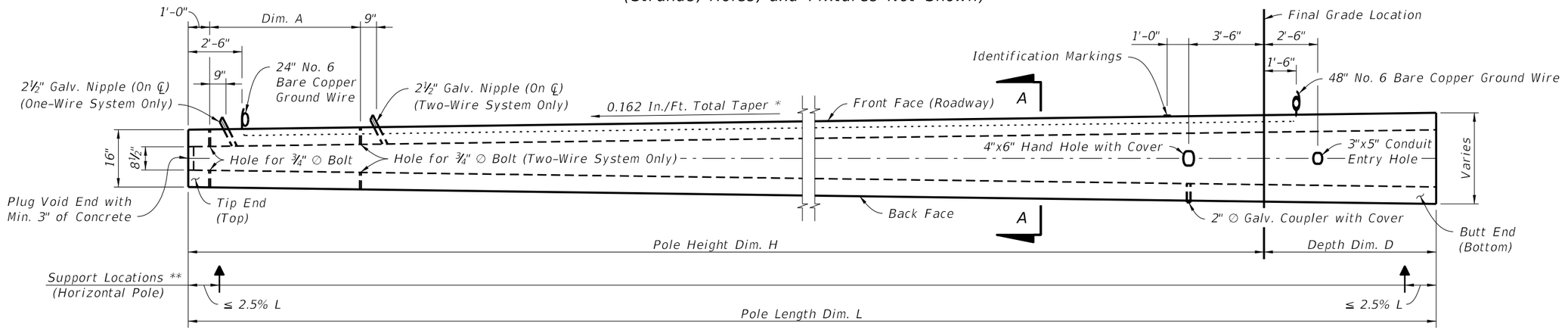
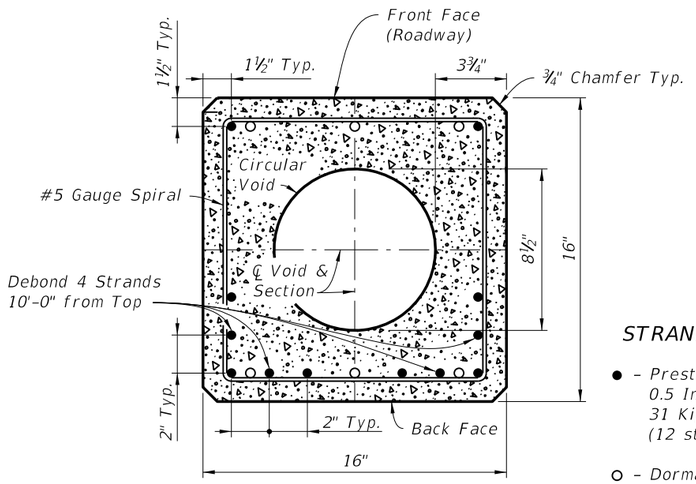
LAST REVISION	REVISION	DESCRIPTION:			INDEX NO.	SHEET NO.
01/01/12			FDOT DESIGN STANDARDS 2013	CONCRETE POLES	17725	7



SPIRAL REINFORCING ELEVATION
(Strands, Holes, and Fixtures Not Shown)



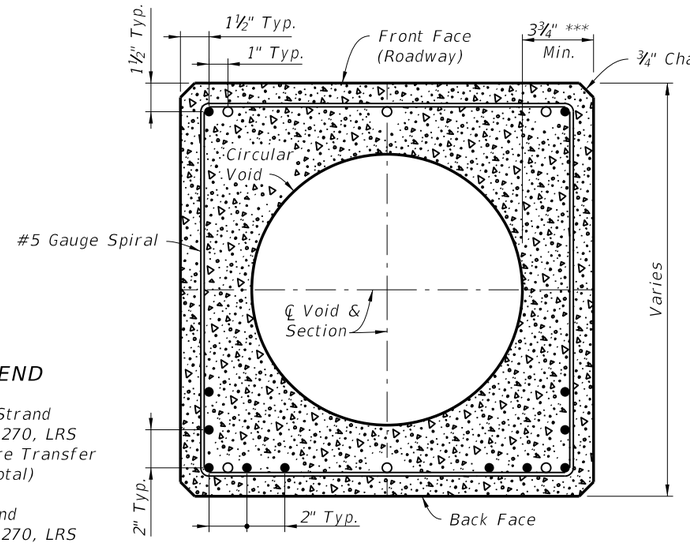
POLE ELEVATION
(Strands and Reinforcing Not Shown)



TIP END SECTION (TOP)
(For Dormant Strand Locations, See Section A-A)

STRAND LEGEND

- ● – Prestressed Strand 0.5 In. Grade 270, LRS 31 Kips Before Transfer (12 strands total)
- ○ – Dormant Strand 0.5 In. Grade 270, LRS (6 strands total)



SECTION A-A
(Typical Square Section)

NOTES:

Work this Index with the Strain Pole Schedule in the plans.

Strands shown are continuous from Tip End to Butt End.

Elevation view scale is exaggerated vertically for clarity.

For final erection, tilt pole upright with single point attachment located a distance 10% L from the Tip End face.

* Taper includes pole width, strands, reinforcing and void. (0.081 In./Ft. per face)

** Support locations are for strand release, storage, lifting and transport. Keep Back Face oriented downward until final erection.

*** Dimension may vary from 3¾" to 5" to accommodate smaller radius of optional stepped (PVC) void. The void diameter shall not be less than 8½".

STRAIN POLE TYPE P-VIII

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LAST REVISION	REVISION	DESCRIPTION:		FDOT DESIGN STANDARDS 2013	CONCRETE POLES	INDEX NO.	SHEET NO.
01/01/12						17725	8